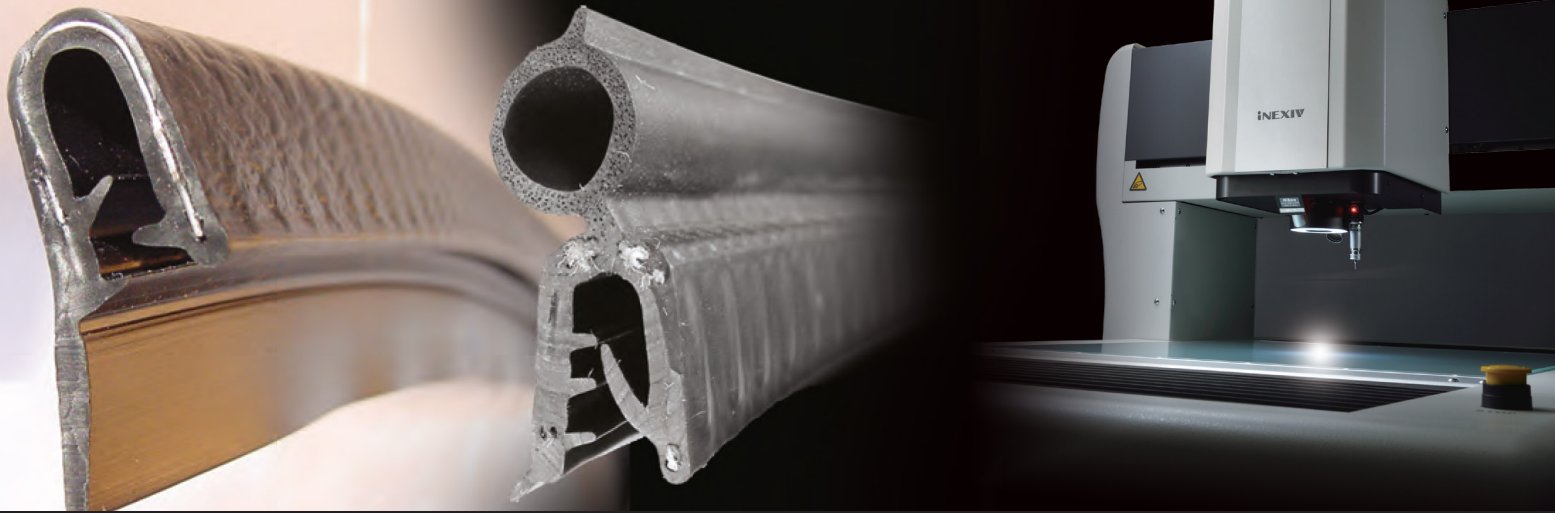




ApplicationFocus Soft Material Seals



Inspection and measurement of Soft Material Seals

The design of soft material seals for automotive doors and other applications has become much more complex in recent years. Due to more stringent requirements for decreased cabin noise, improved weatherproofing and greater product reliability, seals are becoming more important not only in automotive design but also in other fields such as aerospace and home appliances. As design and manufacturing requirements for soft material seals

have become more intricate, the need for faster, more accurate, more highly automated inspection of finished seals has also increased. Traditional manual methods of inspection such as use of optical comparators, which yield only qualitative data resulting in "go" or "no go" decisions, are no longer adequate today.

System Challenge

Optical comparators are limited in their ability to:

- Measure complex, irregular shapes
- Perform best fit of different shapes and sizes
- Precisely compare parts with overlay charts or CAD data
- Generate statistical data as a feedback for process improvement

Nikon's Solution

NEXIV Vision Systems with Automeasure Software

- Profile complex parts and compare profile with CAD file*
- Generate CAD overlay with tolerance bands
- Align CAD overlay with the part to allow a best fit analysis
- Generate quantitative data for statistical process control
- Measure multiple samples with faster throughput times

*CAD overlay is an integral part of the system, not an add on software package

CNC Video Measuring Systems

NEXIV



For more information, go to www.nikonmetrology.com or email sales.nm@nikon.com

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